

## **Preface**

On 4 - 9 July, the Laboratory of information technologies hosted the seventh international "Distributed computing and grid-technologies in science and education" (GRID'2016). The conference is held every two years and is traditional for the Laboratory. This year the conference was dedicated to the 60th anniversary of JINR and the 50th anniversary of LCTA/LIT. Note that the GRID'2016 conference is a unique platform for discussing a wide range of issues related to the use and development of distributed grid-technology, heterogeneous and cloud computing in various fields of science, education, industry and business. The conference attracted a large community of Russian and foreign specialists ready to discuss emerging challenges and prospects of the development of advanced information technology. The conference was attended by more than 250 scientists from the research centers of Azerbaijan, Belarus, Bulgaria, Germany, Georgia, China, Moldova, Mongolia, Romania, Slovakia, Czech Republic, Chile, France, Sweden, etc. Russia was represented by participants from more than 30 universities and scientific research centers. The conference was organized in ten sections which discussed the issues related to the development of grid technologies, heterogeneous computing, volunteer computing, cloud computing, big data analytics. Also, in frames of the conference organized was a school for young scientists, students and postgraduates and tutorials were conducted on heterogeneous and cloud computing.

Financial support for the conference was provided by the JINR Directorate. The sponsors and partners of the conference were companies IBS Platformix, Supermicro Computer, NIAGARA, Brocade, INSPUR, Innopractika, Jet infosystems, Schneider Electric, NVIDIA, Company "AI-Teko", Intel, PARALLEL.RU as well as Publishing house "Open systems".

In total, the conference participants heard 35 plenary, more than 120 oral and 43 poster reports. 40 students and young scientists from Mongolia, Romania and the Russian universities (MEPhI, St. Petersburg State University and University "Dubna") attended the School.

During the conference the participants were involved in fruitful discussions and arguing; proposed were new IT projects aimed at the development of distributed and high-performance computing. New areas of LIT cooperation with organizations, universities of Russia and JINR Member States were found.

Presentations of the delivered reports, electronic version of the Book of Abstracts as well as conference photos are available on the official site of the Conference at <a href="http://grid2016.jinr.ru">http://grid2016.jinr.ru</a>.

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